

[CHIP PACKAGE STRUCTURE AND PROCESS FOR FABRICATING THE SAME]

Abstract

A chip package structure and a process for fabricating the same is disclosed. The chip package structure essentially comprises a carrier, one or more chips, a heat sink and an encapsulating material layer. To fabricate the chip package structure, a carrier and a plurality of chips are provided. Each chip has an active surface and at least one of the active surfaces has a plurality of bumps thereon. The chips and the carrier are electrically connected together. Thereafter, a heat sink is attached to the back of the chips and then at least one heat-resistant buffering film is formed over part of the heat sink surface. An encapsulating material layer is formed over the carrier and filling bonding gaps between the chips and the carrier. The encapsulating material within the bonding gaps has a thickness. The maximum diameter of particles constituting the encapsulating material layer is less than half of the said thickness.